

CLAIMS

What is claimed is:

1. An integrated circuit semiconductor device assembly, comprising:
a board;
a multiconductor port supported by the board;
a stack including a plurality of integrated circuit semiconductor devices supported by the board,
each of the plurality of integrated circuit semiconductor devices including, in turn, a plurality of terminals, each integrated circuit semiconductor device of a first number of integrated circuit semiconductor devices in the plurality of integrated circuit semiconductor devices in the stack having a first number of terminals; and
a multiconductor tape insulating assembly including multiple conductive sections and flexible insulating material, the conductive sections providing conductive paths between a portion of the first number of terminals of the integrated circuit semiconductor devices and the multiconductor tape insulating assembly, the multiconductor tape insulating assembly including a first number of groups of conductive sections, each group of the first number of groups of conductive sections including a first number of conductive sections therein, each section having a plurality of conductors therein located adjacent another conductor.
2. The assembly of claim 1, wherein the multiconductor tape insulating assembly includes tape having multiple conductors attached to an insulative material.
3. The assembly of claim 2, wherein the tape includes tape stored on a spool.
4. The assembly of claim 1, wherein the multiconductor tape insulating assembly includes epoxy material.

5. The assembly of claim 1, wherein an adjacent individual integrated circuit semiconductor device of the plurality of integrated circuit semiconductor devices of the stack is adhesively secured to another adjacent integrated circuit semiconductor device.

6. The assembly of claim 1, wherein the multiconductor tape insulating assembly is positioned between two integrated circuit semiconductor devices of the plurality of integrated circuit semiconductor devices.

7. The assembly of claim 1, wherein at least one conductive path of a conductive section of the multiple conductive sections contacts the same terminal of each integrated circuit semiconductor device of the plurality of integrated circuit semiconductor devices.

8. The assembly of claim 1, wherein a plurality of conductive paths of a conductive section of the multiple conductive sections contacts the same terminal of each integrated circuit semiconductor device of the plurality of integrated circuit semiconductor devices so that corresponding terminals from different individual integrated circuit semiconductor devices of the plurality of integrated semiconductor devices are connected to each other.

9. The assembly of claim 1, wherein the multiconductor port includes a plurality of connectors for connection to the conductive paths of the multiple conductive sections of the multiconductor tape insulating assembly.

10. The assembly of claim 1, wherein the first number of terminals are formed from tape automated bonding (TAB) tape.

11. The assembly of claim 1, wherein the integrated circuit semiconductor devices include packaged integrated circuit semiconductor devices.

12. The assembly of claim 1, wherein the integrated circuit semiconductor devices include unpackaged bare dice.

13. The assembly of claim 1, wherein the board is a printed circuit board.

14. The assembly of claim 1, wherein the integrated circuit semiconductor devices include flip chip integrated circuit semiconductor devices including solder bumps thereon.